Claims

1. Method for the production of a chewing gum for the remineralization of tooth enamel comprising the following steps:

   a. preparation of an aqueous solution of at least one acidifying agent suitable for foodstuff;

   b. addition of a reactive calcium source;

   c. addition of the solution to a thickener, for example gelatin present in a ground or swollen state;

   d. thorough mixing of the components into a gum;

   e. forming of the gum and drying;

   wherein phosphoric acid is added in at least one of the steps a, b or c.

2. Method according to Claim 1, characterized in that the additional following step is proposed:
   mixing of various acidifying agents as reactant for process step a.

3. Method according to anyone of the preceding claims, characterized in that the acidifying agent as pure compound or mixture in step a) is selected from the group, which comprises the following:

- carboxylic acids, in particular including
- lactic acid
- fruit acids, in particular
- pyruvic acid
- citric acid
- malic acid

4. Method according to anyone of the preceding claims, characterized in that the following additional step is proposed:
mixing of a powerful calcium-complexing acid into a solution, which is produced in process step a) with less powerful calcium-complexing acid.

5. Method according to Claim 4, characterized in that the powerful calcium-complexing acid is malic acid or citric acid and the less powerful calcium-complexing acid is pyruvic acid.

6. Method according to anyone of the preceding claims, characterized in that the calcium source as pure compound or mixture is selected from the group, which comprises the following:

- calcium oxide
- calcium hydroxide

- calcium carbonate.

7. Chewing gum produced by a method in accordance with anyone of preceding Claims 1 to 6.

8. Chewing gum for the remineralization of tooth enamel, characterized in that the calcium content amounts to between 30 mMol/kg and 190 mMol/kg (1.4 g/kg to 9.0 g/kg) related to the finished product.

9. Chewing gum according to Claim 8, characterized in that the phosphoric content amounts to between 15 mMol/kg and 500 mMol/kg.

10. Chewing gum according to either one of preceding Claims 8 or 9, characterized in that the calcium content amounts to between 50 mMol/kg and 150mMol/kg (2.3g/kg to 7.0 g/kg) related to the finished product.